

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. *Applicant/Contact name and address:*

James and Greta Voss Family Trust
8116 University Dr
Clayton, MT 63105

2. *Type of action:* Application for Beneficial Water Use Permit 76LJ 30122507

3. *Water source name:* Groundwater

4. *Location affected by project:* The place of use is generally located in the SWSE and SESESW Sec 20, T31N, R21W Flathead County, Montana

5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:*

The Applicant proposes to divert groundwater via a well at a rate of 50 GPM up to 35.5 AF January 1st thru December 31st and impound groundwater in a pond that has a flowing recirculation channel attached to it that in combination totals 4.12-acres for fishery purposes January 1st thru December 31st. The well is the NWSWSE Section 20, Township 31 North, Range 21 West, Flathead County, Montana (Figure 1). The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

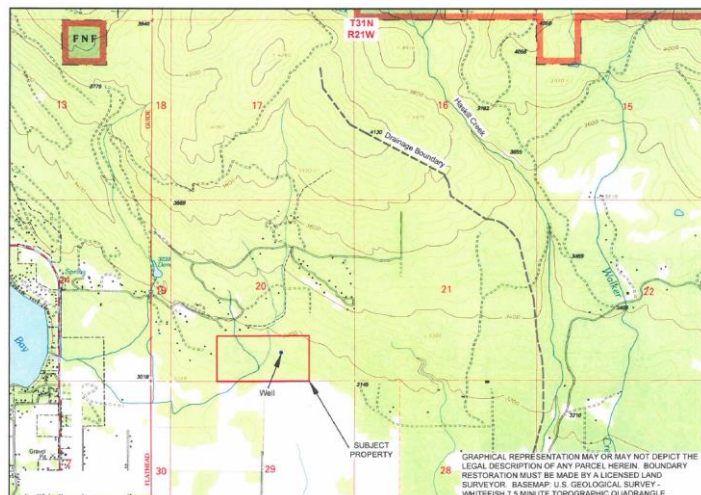


Figure 1: Proposed point of diversion and parcel associated with the pond

6. *Agencies consulted during preparation of the Environmental Assessment:*
(include agencies with overlapping jurisdiction)

- U.S. Fish and Wildlife Service and Montana Natural Heritage Program: Endangered, Threatened Species and Species of Special Concern, Wetland Mapper program
- Montana Department of Fish Wildlife & Parks (DFWP); Dewatered Stream Information
- Montana Department of Environmental Quality's (MDEQ) Clean Water Act Information and PWS Drinking Water Watch databases
- U.S. Natural Resource Conservation Service (NRCS); web soil survey
- Montana Historical Society

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity - *Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

The Application is for groundwater. The proposed new use will cause depletions to Whitefish Lake. This source is not listed as being dewatered.

Determination: No impact.

Water quality - *Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

The Application is for groundwater, depletions up to 6.0 AF will occur to Whitefish Lake annually. According to the MDEQ Clean Water Act website in 2018 Whitefish Lake's water quality was not listed as threatened or impaired. The Department found that the proposed use will not affect water quality.

Determination: No significant impact.

Groundwater - *Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

The Application is for groundwater. The proposed new use will deplete Whitefish Lake 6.0 AF annually. The Department found that the proposed use will not affect the quality of surface waters or groundwater.

Determination: No impact

DIVERSION WORKS - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

The proposed well is 529 feet deep and was drilled by a licensed well driller. Groundwater will be pumped from the well via a Goulds model 45GS30 submersible pump or equivalent at a rate of 50 GPM. Water will be conveyed from the production well via a 2-inch ID HDPE pipe into the pond. The pond and adjoining aeration channel will be lined with 45-mil linear low-density polyethylene geomembrane (DURA-SKRIM N45B). Once the pond is filled, water will be recirculated using a 25-hp sump pump capable of pumping 1,000 GPM. Recirculated water will be pumped through a buried 12-inch diameter pipeline to the faux spring located upgradient of the pond or to a second faux spring located on the western margin of the pond. The faux spring water features will discharge water either into a lined stream channel that flows into the pond or directly into the pond. Based on supplied pump information, the pump is capable of producing 50 GPM at a total dynamic head of 160 feet. At the designed pumping rate of 50 GPM the pond will be initially filled on an every-other-day pumping schedule that consists of 24-hours of pumping followed by a 24-hour recovery period. It will require 321 days to completely fill the pond and faux stream channel. Once filled, the well pump will be controlled based on the water-level in the pond. When the water level decreases two inches, the pump will automatically kick on. It will continue to run until the water level has returned to full pool. At the designed pumping rate of 50 GPM it will take the pump 4,432 minutes (3 days) to reach full pool. Max depth of the pond is 15 feet and the channel 2 feet. Surface area of the pond and channel equals 4.12 acres (4.01-acre pond, 0.11-acre channel) and the capacity of the pond and channel equals 29.43 AF (29.21 AF pond + 0.22 AF channel). The maximum depth of the pond is 15 feet; which is above the recommended minimum depth (12 feet) suggested by Montana Fish Wildlife and Parks (MFWP) to maintain adequate oxygen levels for fish (trout). A stocking permit will be obtained from MT FWP

Determination: No impact.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any “species of special concern,” or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or “species of special concern.”*

The Montana Natural Heritage Program website was reviewed to determine if there are any threatened or endangered fish, wildlife, plants or aquatic species or any “species of special concern” in Township 31N, Range 21W that could be impacted by the proposed project.

The Spalding’s Catchfly (*Silene spaldingii*) is listed as threatened by the United States Forest Service (USFS). Crested Shieldfern (*Dryopteris cristata*), Coville Indian Paintbrush (*Castilleja covilleana*), and Latah Tule Pea (*Lathyrus bijugatus*) are listed as sensitive species by the USFS. Meadow Horsetail (*Equisetum pretense*), Whitebark Pine (*Pinus albicaulis*) and Deer Indian Paintbrush (*Castilleja cervina*) are listed S3 to S3B by MFWP meaning their populations are at risk because their numbers are very limited.

The Canada Lynx (*Lynx Canadensis*), Grizzly Bear (*Ursus arctos*) and Bull Trout (*Salvelinus confluentus*) are listed as threatened by USFS. The Fisher (*Martes pennanti*), Wolverine (*Gulo gulo*) and Westslope Cutthroat Trout (*Oncorhynchus clarkia lewisi*) are listed as sensitive species by the USFS. The Little Brown Myotis (*Myotis lucifugus*), LeConte's Sparrow (*Ammodramus leconteii*), and Bobolink (*Dolichonyx oryzivorus*) are listed S3 to S3B by MFWP meaning their populations are at risk because their numbers are very limited. An adequate quantity of water will still exist in Whitefish Lake to maintain existing populations of both threatened and sensitive species of fish should they exist. The proposed project will not impact any threatened or endangered fish, wildlife, plants and aquatic species or any species of special concern.

Determination: No impact.

Wetlands - *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: N/A, project does not involve wetlands.

Ponds - *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

The Applicant proposes to divert water from a well to fill a lined pond. The pond will not negatively affect existing wildlife, waterfowl, or fish.

Determination: No impact.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

According to soil survey data provided by the NRCS, soil within the place of use consists mostly of Whitefish cobbly silt loam. Soils within the proposed place of use are not susceptible to saline seep and are rated non-saline to very slightly saline (0.0 to 2.0 mmhos/cm). The use of groundwater will not cause degradation of soil quality and stability.

Determination: No impact.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

The proposed place of use has had its vegetation disturbed and been filled in with water. Riparian plants have been planted around the pond.

Determination: No impact.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

No air pollutants were identified as resulting from the Applicants proposed use of groundwater.

Determination: No impact.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

NA-project not located on State or Federal Lands.

Determination: No impact.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

All impacts to land, water and energy have been identified and no further impacts are anticipated.

Determination: No impact.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

The project is located in an area with no locally adopted environmental plans.

Determination: No impact.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

The proposed project will not inhibit, alter or impair access to present recreational opportunities in the area. The project is not expected to create any significant pollution, noise, or traffic congestion in the area that may alter the quality of recreational opportunities. The proposed place of use and diversion do not exist on land designated as wilderness.

Determination: No impact.

HUMAN HEALTH - *Assess whether the proposed project impacts human health.*

There should be no significant negative impact on human health from this proposed use.

Determination: No impact.

PRIVATE PROPERTY - Assess whether there is any government regulatory impacts on private property rights.

Yes___ No_x___ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No impact.

OTHER HUMAN ENVIRONMENTAL ISSUES - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

- (a) Cultural uniqueness and diversity? None identified.
- (b) Local and state tax base and tax revenues? None identified.
- (c) Existing land uses? None identified.
- (d) Quantity and distribution of employment? None identified.
- (e) Distribution and density of population and housing? None identified.
- (f) Demands for government services? None identified.
- (g) Industrial and commercial activity? None identified.
- (h) Utilities? None identified.
- (i) Transportation? None identified.
- (j) Safety? None identified.
- (k) Other appropriate social and economic circumstances? None identified.

2. Secondary and cumulative impacts on the physical environment and human population:

Secondary Impacts: None identified.

Cumulative Impacts: None identified.

3. Describe any mitigation/stipulation measures: None

4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:

No reasonable alternatives were identified in the EA.

PART III. Conclusion

1. Preferred Alternative: None identified.

2 Comments and Responses

4. Finding:

Yes___ No X Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

An EA is the appropriate level of analysis for the proposed action because no significant impacts were identified.

Name of person(s) responsible for preparation of EA:

Name: Melissa Brickl

Title: Hydrologist/Water Resource Specialist

Date: December 3, 2019